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LABRADOR TEA IN NEW JERSEY

BY KENNETH K. MACKENZIE.

On June 19, 1918, while going along the road at the north-westerly corner of Budd's Lake, I was joined by a resident of one of the houses along the road, Mr. M. E. Palmer. Conversation developed the fact that Mr. Palmer had made a business of collecting Sphagnum moss, and was well acquainted with a number of bogs in Morris County, New Jersey, and especially with the large one at the westerly end of Budd's Lake. Much to my satisfaction he joined me for the day, and under his guidance I got into the bog from the land side in several different places. There are some four or five separate open places on the westerly side of the lake which are separated from one another by small streams lined by very dense swampy thickets through which it is almost impossible to go. The easiest way of visiting the various open bogs is by way of a boat from the lake side, but it is possible to reach them all successively from the land side by obscure trails through the dense thickets. To get from one to the other, a person has however to go back each time a very considerable way from the lake margin in order to avoid the troublesome thickets above referred to.

This bog at Budd's Lake is by far the best open sphagnum bog which we have in northern New Jersey and contains in abundance a number of northern species which are either unknown in the State elsewhere or are very local. One of these local species is *Andromeda glaucophylla* Link., which is abundant in some of the openings. While looking at this Mr. Palmer asked me what

was the plant which grew in similar places and looked a great deal like the *Andromeda* but had the leaves hairy beneath and had a very powerful odor. This question naturally interested me very much and I told him that the only plant which answered this description was Labrador tea (*Ledum groenlandicum*) and further that although this plant had been attributed to New Jersey for a number of years yet nobody knew of any definite station for it. It was vaguely attributed to Sussex County, but neither at the New York Botanical Garden nor at Harvard University was there any definite or further information available.

Mr. Palmer informed me that he knew of a spot north of Dover where it grew and promised to get some for me. True to his promise some ten days later a bundle came to me by mail containing specimens of the Labrador tea from the Station north of Dover.

As Mr. Palmer wished to show me the plant growing and I was very desirous of seeing it in New Jersey, we made arrangements to meet at the Dover railroad station on July 7, 1918. The day turned out to be a most pleasant one, and we went north from Dover towards Mt. Hope. We took woodland paths known to Mr. Palmer, and thus saved some distance, but for one not acquainted with these paths the way to go would be straight along the main road from Dover to Mt. Hope until one comes to the cross road about $1\frac{1}{2}$ miles north of Dover station. Going east from this point to Rockaway this road is well travelled, but going west it is almost abandoned and largely overgrown with grass. However, the course is westward for about half a mile until one begins going down hill slightly, when one must go along an old woodland path due north through dense second growth woods for about half a mile more. The path to follow is along the westerly side and slightly below the top of the ridge and the point to be reached is about three-fourths of a mile due north of the figures 775 on the Geological Survey map, Lake Hopatcong quadrangle. Reaching this point one sees immediately west at the foot of the slope a dense swampy thicket with larch trees in the center. It would not be suspected that there is an opening in the center of this thicket and I do not believe that even a

botanist would ever have thought of trying to penetrate it. But Mr. Palmer had known the interior of this swamp for years, and it was into it that he guided me. As the swamp is not a large one, it did not take very long to get through the thickets and into the center. I was much surprised to find how much open space there was in the center, and it certainly was a great pleasure to see the *Ledum* in abundance all over the northern end of the opening together with quantities of the small cranberry (*Oxycoccus palustris*) and small quantities of *Andromeda glaucophylla*. Coming out of the bog we got back on the woodland trail which curved around to the east and hit the Mt. Hope road some five eighths of a mile north of the cross-road. As a matter of fact the easiest way of getting to the bog is by going to this point on the Mt. Hope road and then going west, but it is not so easy to give precise directions for this course as for the other.

When we reached the Mt. Hope road Mr. Palmer pointed out a place where a house had once been, little more than a quarter of a mile from the bog we had visited, and told me that his father was born there, and how his father and himself through their searches for sphagnum had known of this bog for many years.

Palmer's bog, as I am calling this interesting locality, will in all probability remain permanently undisturbed, and as it is an easy trip from Dover should be visited by our New York botanists.

I might add that while Labrador tea is reported from New Jersey in Britton's & Brown's Illustrated Flora 2: 557, yet Dr. Britton did not know of any definite locality for it, but was under the impression that his record must have come from Dr. Porter. The herbarium of the latter has however thrown no light on the point. Inquiry from Dr. Fernald as to the source of the record in Gray's Manual (7 Ed.) 630, brought back the answer that this record was taken from Dr. Britton. These inquiries by me were made when Mr. Taylor was getting up the data for his local flora; and as all my attempts to get information as to the occurrence of Labrador tea in New Jersey then proved fruitless,

it will be easily understood how interesting it was to me to at last definitely know that this plant actually grew in the State.

SHORTER NOTES

DOUBLE FLOWERS IN *HEMEROCALLUS FULVA*, LINN.—Because such never seems to have been previously recorded for the day lily (*Hemerocallis fulva* L.) and seems to have been infrequently observed in the Liliaceae as a family, the writer reports double flowers in this species. Observations based on six specimens collected from the premises of Prof. F. C. Nipher, Kirkwood, Mo., are given.

The perianth consists of 12 distinct segments, alternating with and overlapping one another. Stamens 12, two of which are borne on opposite segments of the perianth. Occasionally a small number of the stamens are aborted. Styles two in number, adjacent and united, but mostly aborted to a C-shaped or claw-shaped appendages. The plant is quite typical with regard to color.

Dissections revealed no sign of insect injury, etc., to which the double flowers might be attributed. The ovules appeared to be unusually minute. Observers of the particular group of plants in previous years stated they had never noted double flowers. Since it was found that botanical terminology supplies no technical term descriptive of this particular condition, there is suggested the term *diploous* (Greek—literally two-fold), as being advantageous.—N. M. GRIER.

REVIEWS

McAtee's Natural History of the District of Columbia*

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* McAtee, W. L. A sketch of the natural history of the District of Columbia, together with an indexed edition of the U. S. Geological Survey's 1917 map of Washington and vicinity. Pp. 1-142 + 5 maps. Price \$2.15 postpaid. May, 1918.

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